PTO/SB/08A (08-03) Approved for use through 07/31/2006. OMB 0551-0031
U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE
Under the Paperwork Residence of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Complete if Known

Substitute for form 1449/PTO

INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(Use as many sheets as necessary)

Application Number	10/612,704
Filing Date	July 02, 2003
First Named Inventor	Daniel David Lectoux Et. Al.
Art Unit	1624
Examiner Name	Unknown
Attorney Docket Number	UC0213 US NA3

	T - 04 -		U. S. PATENT DO		1 5 6 1 11 100
Examiner Initials*	Cite No.1	Document Number Number-Kind Code ^{2 (f known)}	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		US-	 		1.3.00.450
		05-			İ
-		US-			
		US-		•	
		US-			
		US-	<u>'</u>		
-		US-	† 		
		US-			
		US-			· ·
		US-			
		US-			
		US-			<u> </u>
		US-			
	\vdash	US-	· · · · · · · · · · · · · · · · · · ·		·

		FORE	IGN PATENT DOCU	MENTS		
Examiner Initials*	Cite No.1	Foreign Patent Document	Publication Date	Name of Patentee or Applicant of Cited Document	Peges, Columns, Lines, Where Relevant Passages	
		Country Code ³ "Number ⁴ "Kind Code ⁶ (If known)	MM-DD-YYYY		Or Relevant Figures Appear	۲⁰
JT	<u> </u>	WO 02/088274 A1	11-07-2002	LG CHEM Ltd.		1
						<u> </u>
	<u> </u>					↓_
						↓
	ļ				<u> </u>	├
	1			•	i	1

Examiner		Date	11/07/2006
Signature	/Jaison Thomas/	Considered	11/0//2000

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered, include copy of this form with next communication to applicant. *Applicant's unique citation designation number (optional). *See Kinds Codes of USPTO Patent Documents at www.uspto.gov or MPEP 901.04. *Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). *For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. *Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. *Applicant is to place a check mark here if English language Translation is attached.

Translation is attached.

This collection offormation is required by 37 CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Tradernark Office, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

If you need assistance in completing the form, call 1-800-PTO-9199 (1-800-786-9199) and select option 2.



PTO/SB/08b (08-03)
Approved for use through 06/30/2006. OMB 0651-0031
U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE on Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute	(Use as many sheets as necessary)	Complete if Known			
				Application Number	10/612704 •
INFO	INFORMATION DISCLOSURE		Filing Date	July 02, 2003	
STATEMENT BY APPLICANT		First Named Inventor	Daniel David Lecloux Et. Al.		
				Art Unit	1624
(Use as many she		heets as necessary)		Examiner Name	
Sheet	2	of	2	Attorney Docket Number	UC0213USNA3

		NON PATENT LITERATURE DOCUMENTS	
Examiner Initials*	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T²
JT		NGUYEN, T.P. et al., Multilayer light emitting diodes using a PPV based polymer, Optical Materials, January 1998, 154-158, 9, Elsevier Science B.V.	U
		THOMAS, K.R. JUSTIN, et al., Quinoxalines Incorporating Triarylamines: Potential Electroluminescent Materials with Tunable Emission Characteristics, Chem. Mater., 2002, 2796-2802, 14, American Chemical Society	P
		PATENT ABSTRACTS OF JAPAN, Organic Electroluminescent Element, JP06088072, March 29, 1994, Vol. 018, No. 347, Indemitsu Kosan Co. Ltd.	V
***************************************		PATENT ABSTRACTS OF JAPAN, Organic Thin-Film EL Element, JP04110390, April 10, 1992, Vol. 016, No. 358, Nippon Soda Co. Ltd.	[2
***************************************		PATENT ABSTRACTS OF JAPAN, Aromatic Methylidene Compound, Aromatic Aldehyde Compound for Producing the Same and Production Thereof, JP2000204082, July 25, 2000, Vol. 2000, No. 10, Matsushita Electric Ind. Co. Ltd.	[v
		PATENT ABSTRACTS OF JAPAN, Organic Thin Film EL Element and Quinoxalino-Benzooxazine Derivative Used in the Element, JP2000198788, July 18, 2000, Vol. 2000, No. 10, Sagami Chem. Res. Center	[v

Examiner Signature /Jaison Thomas/ Date Cons	11/07/2006
--	------------

^{*}EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

1 Applicant's unique citation designation number (optional). 2 Applicant is to place a check mark here if English language Translation is attached.

This collection of information is required by 37 CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.



PTO/SB/08B (08-03)
Approved for use through 07/31/2008, OMB 0651-0031
U.S. Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE

U.S. Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE
Under the Paperwork Reduction Act of 1996, no persons are required to respond to a collection of information unless it contains a valid OMB control number

Substitute for form 1449A/PTO

INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(use as many sheets as necessary)

of 3

	Complete if Known	
Application Number	10/612,704	
Filing Date	December 08, 2003	
First Named Inventor	Norman Herron et al.	
Group Art Unit	1624	
Examiner Name	Unknown	
Attorney Docket Number	UC0213USNA3	

		OTHER PRIOR ART NON PATENT LITERATURE DOCUMENTS	
Examiner Initials *	Cite No.1	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T 2
JT		PATENT ABSTRACTS OF JAPAN, Organic Electroluminescent Element And Display Device, JP2003045662, February 14, 2003, Vol. 2003, No. 08, Konica Corp.	v
		PATENT ABSTRACTS OF JAPAN, Organic Electroluminescent Element and Its Manufacture, JP2000133453, May 12, 2000, Vol. 2000, No. 08, Idemitsu Kosan Co Ltd.	(3 ′
		PATENT ABSTRACTS OF JAPAN, Novel Heterocyclic Compound, Light-Emitting, Element Material and Light- Emitting Element Using This Material, JP2001335776, December 4, 2001, Fuji Photo Film Co Ltd.	~
		PATENT ABSTRACTS OF JAPAN, Organic EL Element Using Quinoxaline Compound, JP09188874, July 22, 1997, Vol. 1997, No. 11, TDK Corp.	四
		PATENT ABSTRACTS OF JAPAN, Electrophotographic Photoreceptor, JP07152170, June 16, 1995, Vol. 1995, No. 09, Mita Ind Co Ltd.	<u>G</u>
		PATENT ABSTRACTS OF JAPAN, Organic EL Element, JP07026255, January 27, 1995, Vol. 1994, No. 04, Idemitsu Kosan Co Ltd.	¥
		PATENT ABSTRACTS OF JAPAN, Electrophotographic Sensitive Body, JP02064553, March 5, 1990, Vol. 014, No. 245, Canon Inc.	<u>d</u>
$\overline{\mathbf{V}}$		PATENT ABSTRACTS OF JAPAN, Light-Emitting Element, JP2003086381, March 20, 2003 Vol. 2003, No. 07, Toray Ind Inc.	년

				•
Examiner Signature	/Jaison Thomas/	Date Considered	11/07/2006	

^{*}EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

Applicant's unique citation designation number (optional). Applicant is to place a check mark here if English language Translation is attached.

This collection of information is required by 37 CFR 1,97 and 1,98. The information is required to obtain or retain a benefit by the public which is to file (and by USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the Individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer. U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

Under the Faperw

Approved for use through 07/31/2008. OMB 0651-0031

U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

ork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449/PTO

INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(Use as many sheets as necessary)

Complete if Known **Application Number** 10/612,704 July 02, 2003 Filing Date First Named Inventor Norman Herron et al. Art Unit 1624 Unknown **Examiner Name** Attorney Docket Number UC0213 US NA3

_			U. S. PATENT D	OCUMENTS	
Examiner Initials*	Cite No.1	Document Number Number-Kind Code ^{2 (F known)}	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
JT		US- 2002/0135292A1	09-26-2002	Kamatani et al.	
		US-			
		US-			
		US-		_	
		US-		,	
		US-			
*		US-			
		US-			
		US-	,		
		US-			
	Ī. —	US-			
		US-			
		US-			

		FOREIC	ON PATENT DOCU	MENTS		
Examiner Initials*	Cite No.	Foreign Patent Document	Publication Date	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages	
_		Country Code ³ "Number ⁴ "Kind Code ⁵ (if known)	MM-DD-YYYY		Or Relevant Figures Appear	Ľ
JT		WO 01/72925 A1	10-04-2001	Korea Adv Inst Science		1
JT		WO 02/088274 A1	11-07-2002	LG CHEM Ltd.		_
JT		₹ EP 1 013 740 A2	06-28-2000	Konica Corporation		~
JT		EP 1 182 183 A1	02-27-2002	Idemitsu Kosan Co. Ltd.		~
						<u> </u>
					1 .	1

Examiner Signature	/Jaison Thomas/	Date Considered	11/07/2006	

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with, MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. 'Applicant's unique citation designation number (optional). 'See Kinds Codes of USPTO Patent Documents at www.uspto.gov or MPEP 901.04. 'Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). 'For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. 'Skind of document the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. 'Applicant is to place a check mark here if English tanguage Translation is attached.

Translation is attached.

This collection of information is required by 37 CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the Individual case. Any comments on the amount of time you require to complete this form end/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

If you need assistance in completing the form, call 1-800-PTO-9199 (1-800-786-9199) and select option 2.

ELT & TRADE

PTO/SB/08B (08-03)

Approved for use through 07/31/2006. OMB 0651-0031

U.S. Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number

Substitute for form 1449A/PTO

INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(use as many sheets as necessary)

of 3

Complete if Known Application Number 10/612,704 December 08, 2003 Filing Date First Named Inventor Norman Herron et al. Group Art Unit **Examiner Name** Unknown Attorney Docket Number UC0213USNA3

		OTHER PRIOR ART NON PATENT LITERATURE DOCUMENTS		
Examiner Cite No.1		Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.		
JT .		NGUYEN, T. P. et al., Multilayer light emitting diodes using a PPV based copolymer, Optical Materials, January 1998, 154-158, 9, Elsevier Science B.V.		
		THOMAS, K. R. JUSTIN et al., Quinozalines Incorporating Triarylamines: Potential Electroluminescent Materials with Tunable Emission Characteristics, Chem. Mater., 2002, 2796-2802, 14, American Chemical Society	র্দ্র	
		SCHMITZ, CHRISTOPH, Polymeric Light-Emitting Diodes Based on Poly(p-phenylene ethynylene), Poly(triphenyldiamine), and Spiroquinoxaline, Advanced Functional Materials, February 2001, 41-46, 11(1), Wiley-Vch Verlag GmbH	ঐ	
		CUI, YUANTING et al., Thiophene-Linked Polyphenylquinoxaline: A New Electron Transport Conjugated Polymer for Electroluminescent Devices, Macromolecules, 1999, 3824-3825, 32, American Chemical Society	Ø	
		JANDKE, MARKUS et al., Phenylquinoxaline Polymers and Low Molar Mass Glasses as Electron-Transport Materials in Organic Light-Emitting Diodes, Macromolecules, 1998, 6434-6443, 31, American Chemical Society	œ	
		POSCH, P. et al., Perylenediimides with Electron Transport Moietles for Electroluminescent Devices, Synthetic Materials, 1999, 1110-1112, 102, Elsevier Science S.A.	Ø	
		SCHURMANN, H. et al., Ultraviolet Photoelectron Spectroscopic Study of Heterocyclic Model Compounds for Electroluminescent Devices, Synthetic Materials, 1999, 1069-1070, 102, Elsevier Science S.A.	র	
		PATENT ABSTRACTS OF JAPAN, Organic Electroluminescent Element, JP06088072, March 29, 1994, Vol. 018, No. 347, Idemitsu Kosan Co. Ltd.	B	
		PATENT ABSTRACTS OF JAPAN, Organic Thin-Film EL Element, JP04110390, April 10, 1992, Vol. 016, No. 358, Nippon Soda Co. Ltd.	ď	
		PATENT ABSTRACTS OF JAPAN, Aromatic Methylidene Compound, Aromatic Aldehyde Compound For Producing The Same And Production Thereof, JP2000204082, July 25, 2000, Vol. 2000, No. 10, Matsushita Electric Ind. Co. Ltd.	四	
$\overline{\downarrow}$		PATENT ABSTRACTS OF JAPAN, Organic Thin Film EL Element and Quinoxalino-Benzooxazine Derivative Used In The Element, JP2000198788, July 18, 2000, Vol. 2000, No. 10, Sagami Chem Res Center	d	

Examiner Signature	/Jaison Thomas/	Date Considered	11/07/2006	

^{*}EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

Applicant's unique citation designation number (optional). Applicant is to place a check mark here if English language Translation is attached.

This collection of Information is required by 37 CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Petent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.